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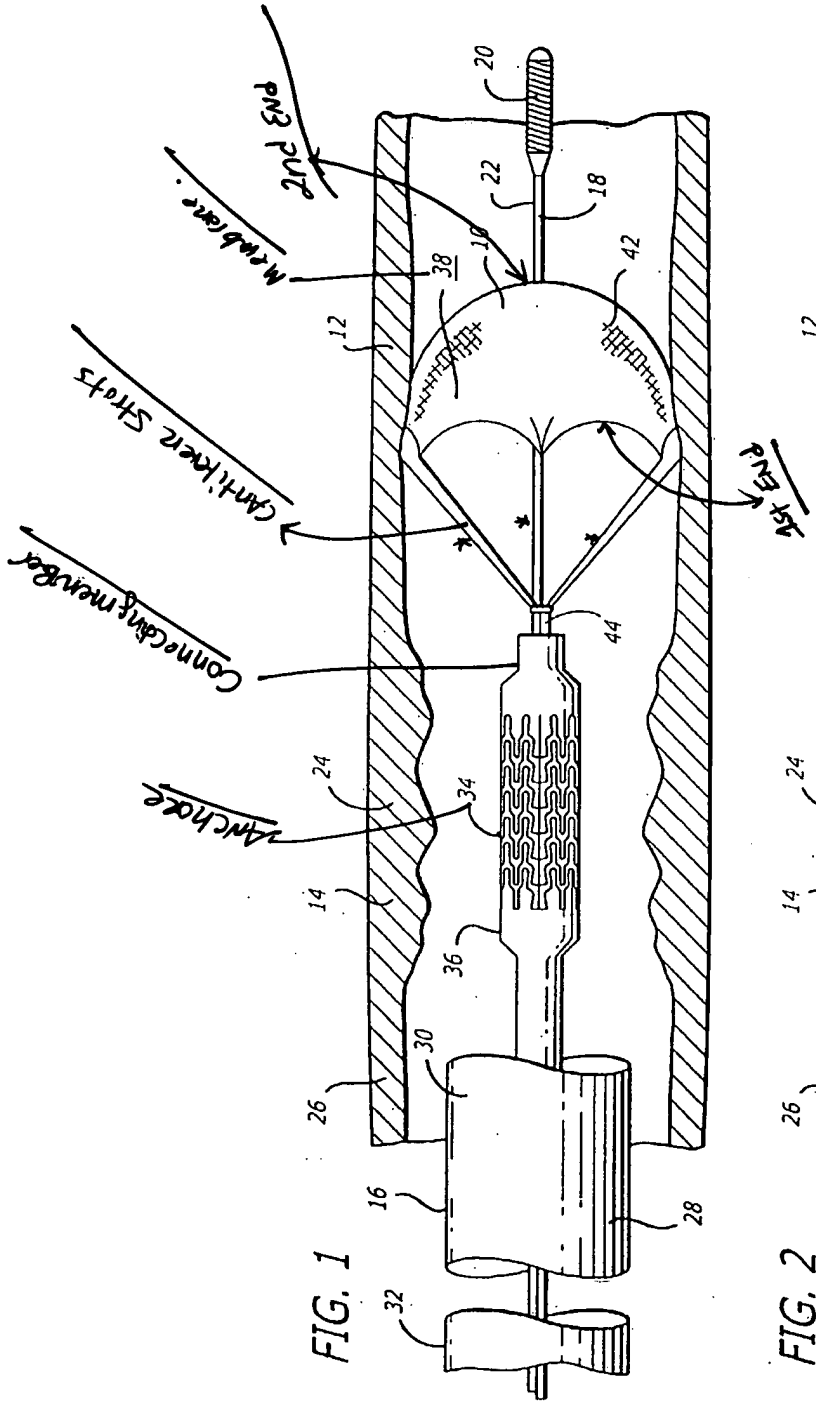

FIG. 1

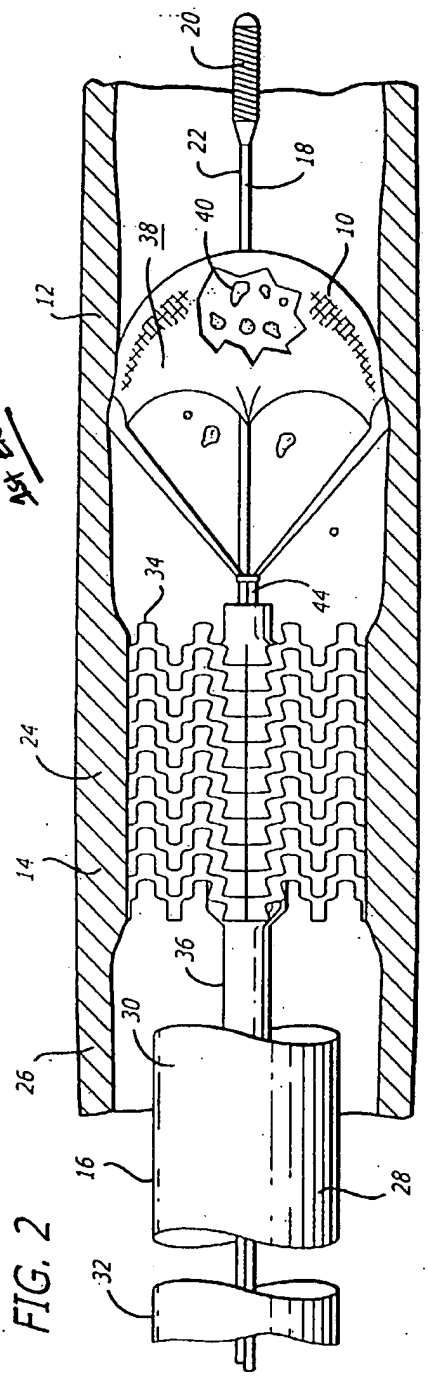

FIG. 2

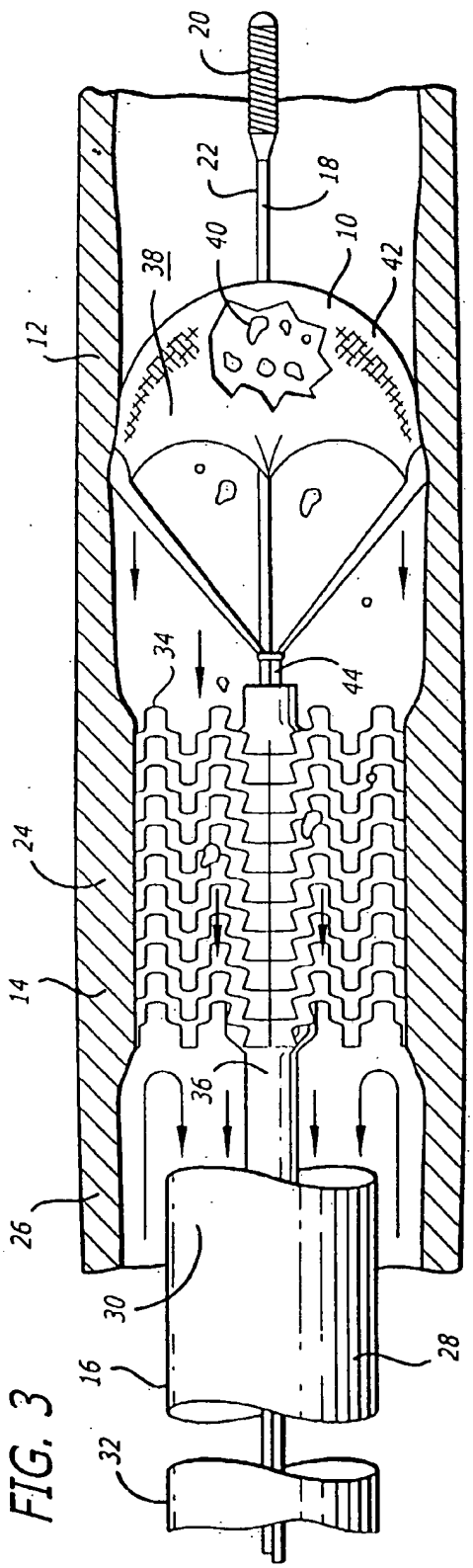
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FIG. 3

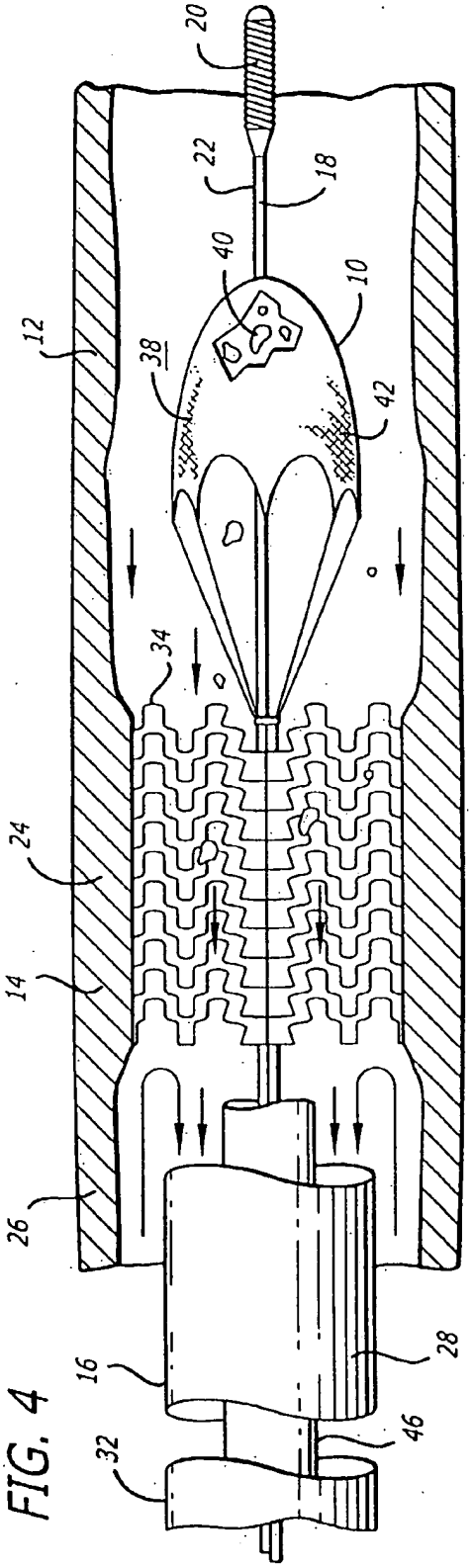
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FIG. 4

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(54) VESSEL OCCLUSION DEVICE FOR EMBOLIC PROTECTION SYSTEM

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(57) ABSTRACT

A system used in a blood vessel when an interventional procedure is being performed in a stenosed or occluded region, which is capable of capturing embolic material which may be released into a blood vessel during a therapeutic interventional procedure at the site of a lesion in the blood vessel. The system is adapted to be utilized in a collateral blood supply system adapted to enable the flow of blood to bypass the blood vessel upon blocking thereof and to enable the reverse flow of blood through the blood vessel upon unblocking thereof. The system includes a guide wire, including a distal end, adapted to be positioned in a blood vessel relative to an interventional procedure site. A guide catheter, including a distal end, is adapted to enable the interventional procedure to be performed, and to be inserted over the guide wire and through a patient's vasculature to a position in the blood vessel relative to the interventional procedure site. An occluding device for occluding and blocking a blood vessel at a location relative to the interventional procedure site is adapted to be positionable at a location relative to he interventional procedure site, to be expandable so as to prevent and block the flow of blood past the occlusion, and to enable the capture of embolic material which may be released into the blood in the blood vessel during the therapeutic interventional procedure, and to be contracted to unblock the blood vessel and enable the recovery of captured embolic material.